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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,551	03/07/2002	Hideo Kurokawa	OGOH: 105	6885

7590 10/03/2003
Parkhurst & Wendell
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1421 Prince Street
Alexandria, VA 22314-2805

EXAMINER

TRAN, CHUC

ART UNIT PAPER NUMBER

2821

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,551

Applicant(s)

KUROKAWA ET AL.

Examiner

Chuc D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-23, 26-38, 41-46 and 52-58 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 24, 25, 39, 40 and 47-51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>g</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 30 and 46 is objected to because of the following informalities: line 1 change "he cathode ray tube" to - - the cathode ray tube - -. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 53-58 are recites the limitation "an image display and a cathode ray tube" in page 16, line 1, line 4, and line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7, 10-23, 26-38, 41-46, and 52-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (USP. 6,469,431) in view of Inoue et al (USP. 5,663,610).

Regarding claims 1-7, 10-23, 26-38, 41-46, and 52-58, Suzuki et al disclose a color CRT having shadow mask with vibration attenuator comprising:

- a cathode ray tube (15) with an electron beam controlling circuit, a cabinet (Col. 1,

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Line 15) and a loudspeaker (Col 9, Line 30, a phosphor screen (2a), a shadow mask (6), a mask frame (7) (Fig. 15) (Col. 1, Line 14), a frame portion (11b), a damper (18) located in an opening shadow mask for attenuating vibration (Col. 12, Line 50) (Fig. 12), wherein the shadow mask comprise a Fe-Ni alloy (Col. 6, Line 48) and the tension in the middle portion of the shadow mask is larger than the tension at the edge portion of the shadow mask $T1 > T2 > T3$ and $T1.1 \times T3$ (Col. 3, Line 25-50). However, Suzuki is silent on the limitation of an elastic support member. Inoue et al disclose the V shaped elastic support member (7) is located substantially in the middle portion of a frame portion (6) (Fig. 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki by using the elastic support member spring as taught by Inoue. The ordinary artisan would have been motivated to modify Suzuki in the manner describe above for supporting the shadow mask (Col. 1, Line 42).

Allowable Subject Matter

7. Claims 8-9, 24-25, 39, 40, and 47-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to appreciate the advantage offered by a cathode ray tube with the following distinctive features such as set by all of the claims. In particular, the art of record fails to teach or fairly suggest constructing the force is applied to the portion of the shadow mask is in the range of 1 kgf to 8 kgf to include the spring constant of the elastic support member is in the range of 0.1kgf/mm to 2.5 kgf/mm posses all of the distinctive features such as

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defined by claims 8-9, 24-25, 39, 40, and 47-51 to make the vibration of the shadow mask can be extinguished positively.

Citation of relevant prior art

Prior art Tseng et al (USP. 5,990,607) disclose a shadow mask for color CTR.

Prior art Tokita et al disclose a method and apparatus for supporting a shadow mask.

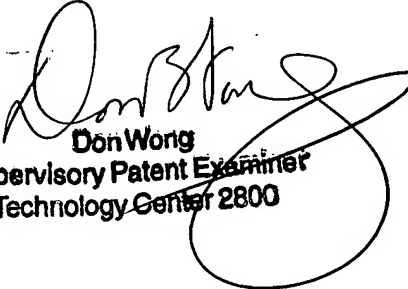
Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (703)306-5984. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (703)308-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

TDC
September 11, 2003


Don Wong
Supervisory Patent Examiner
Technology Center 2800